ECONOMIC COMMENTARY

Alberta has highest Productivity in 2012, overtaking Newfoundland

June 24, 2013

Highlights:

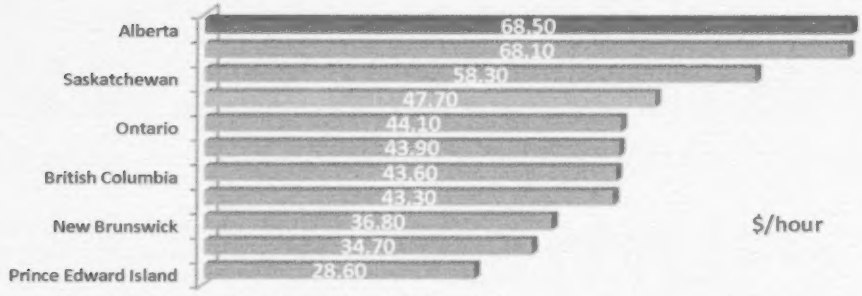
Alberta had the highest labour productivity level of any province in 2012, and productivity growth averaged 0.8% per year between 2007 and 2012, double the Canadian increase of 0.4% per year.

Alberta Government

According to Statistics Canada's latest productivity database, Alberta has the highest labour productivity in the country. In 2012, labour productivity in Alberta's business sector was $68.50 per hour[1], 44% higher than the Canadian average of $47.70 per hour, and just ahead of Newfoundland's $68.10. Newfoundland had been in the lead during the five years prior to 2012.

Business Sector Productivity of Labour - 2012

(Real GDP per Hour Worked, in 2007 constant dollars)



Source: Statistics Canada -- GDP at basic prices

Over the past five years, GDP in Alberta's business sector[2] increased by 9.3% or 1.8% per year. Over the same period, the total number of hours worked rose 4.9% or 1.0% per year. As a result, labour productivity rose only 4.3% over the 5-year time period or 0.8% per year. In other words, about 45% of the increase in GDP came as a result of increased productivity and 55% was the result of increased labour input.

Alberta's 0.8% average annual growth rate in labour productivity was the third highest provincial growth rate over the past five years behind Saskatchewan and Manitoba, and was double the Canadian growth rate of 0.4% per year.

Business Sector Labour Productivity Growth Rates 2007-2012 (Based on Hours Worked)

Source: Statistics Canada -- GDP at basic prices

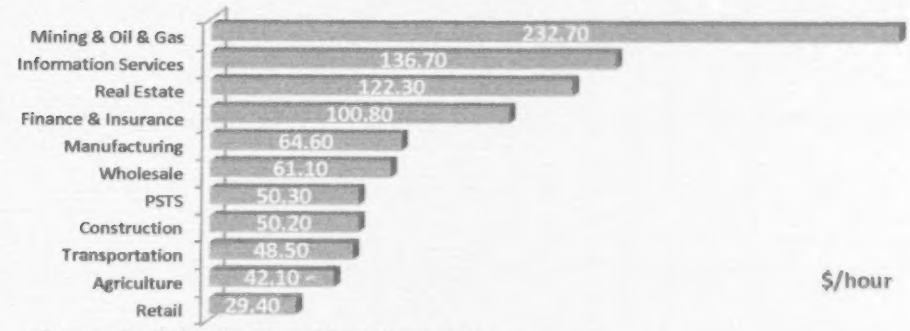
[1] Real GDP per hour worked

[2] Excludes non-commercial sectors, such as public administration, healthcare and education

Both Alberta's high productivity level and its less than robust productivity growth rate are in large part the result of its large and capital-intensive oil and gas extraction sector. In 2012, the labour productivity level was $233 per hour in the mining and oil and gas sector, because of very high levels in the oil and gas extraction industry ($425 per hour). When excluding the mining and oil and gas sector Alberta's labour productivity level drops to $51.30 per hour, 7.5% higher than the Canadian average of $47.70. It is also much lower than the overall business sector productivity level of $68.50 in Alberta.

Labour Productivity in Alberta Industries in 2012

(Real GDP per Hour Worked, in 2007 constant dollars)



Source: Statistics Canada -- GDP at basic prices

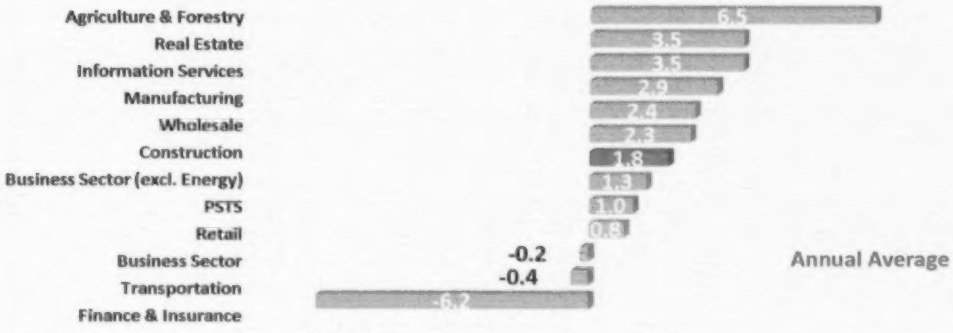
Although the mining and oil and gas sector has the highest productivity level, it has declined sharply over the past 15 to 20 years, for instance productivity declined from $320 per hour in 2007 to $233 in 2012. There are a number of reasons for this decline. First, Alberta's conventional oil and gas resources are in decline and it takes more effort to find and extract each additional barrel or gigajoule. Second, the switch to oil sands has also reduced the overall productivity level for the oil and gas extraction sector as oil sands require more labour than conventional reserves. Third, new oil sands projects will have employees on-site before production actually starts (this is raising hours worked without any increase in GDP). Fourth, high prices have made high cost oil reservoirs more attractive.

When excluding the mining and energy sector from the business sector, Alberta's productivity performance is much better with productivity rising by 1.8% per year between 2007 and 2012. This growth rate far exceeds the Canadian average of 0.7% per year (after excluding the mining and oil and gas sector), and compares favourably with the growth rates in most developed economies.

Most other sectors had strong productivity growth. Farm consolidation and capital investment led to the highest productivity growth in the agricultural sector with a rate of 6.5% per year. Information services (mainly telecommunication services) benefited from heavy investment in telecom equipment, especially by cell phone companies, and had productivity growth of 3.5% per year. Productivity growth of 3.5% per year in the real estate sector was the result of a large decline in the number of jobs in the rental and leasing sub-sector. Alberta's manufacturing sector had relatively strong productivity growth of 2.9% per year, a rate that was actually higher than the 1.8% average annual growth in the U.S.

manufacturing sector over the same period and Canada's 0.6% growth rate. High growth was registered in the globally competitive machinery (8.4% per year), fabricated metals (6.0%) and wood products (5.4%) manufacturing sub-sectors.

Labour Productivity Growth Rates in Alberta's Industries
2007 - 2012 (Based on Hours)



Source: Statistics Canada and Alberta Enterprise & Advanced Education

In summary, after a five-year hiatus Alberta overtook Newfoundland in 2012 as the province with the highest labour productivity level. Although weak historically, Alberta's 0.8% average annual productivity growth between 2007 and 2012 compares favourably to rates achieved in the other provinces and Canada. Moreover, if we exclude its largest sector, mining and oil and gas, which has had a long period of declining productivity, Alberta's growth rate of 1.8% per year looks quite strong.